

# EUROPEAN PATENT OFFICE

## Patent Abstracts of Japan

PUBLICATION NUMBER : 2002343383  
PUBLICATION DATE : 29-11-02

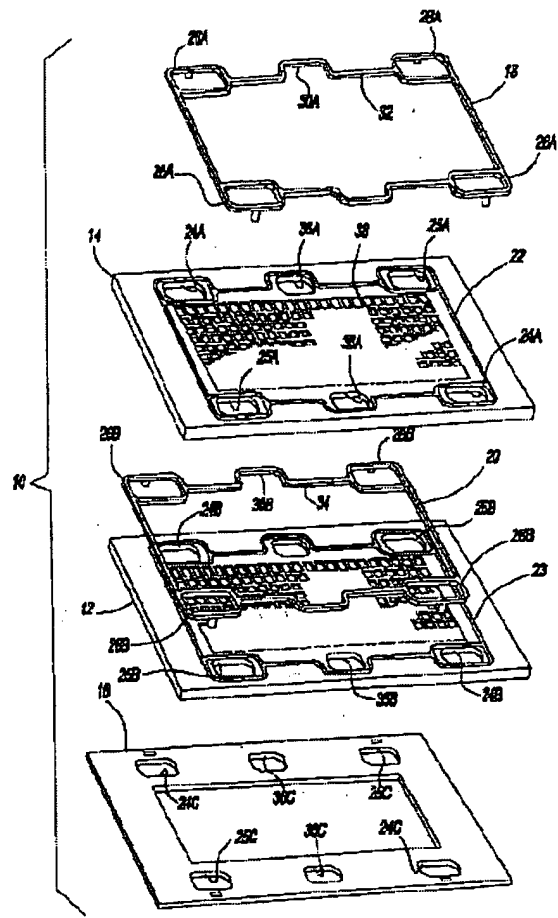
APPLICATION DATE : 14-05-02  
APPLICATION NUMBER : 2002138227

APPLICANT : DANA CORP;

INVENTOR : KUMMEROW JACK A C;

INT.CL. : H01M 8/02

TITLE : MOLDED FUEL CELL PLATE WITH SEAL



ABSTRACT : PROBLEM TO BE SOLVED: To provide an improved structure for mass production, ensuring a countermeasure against the leakage between adjacent fuel cell plates with high reliability.

SOLUTION: One plate is an anode and the other plate is a cathode. The anode plate and the cathode plate are physically combined and formed into a pair, and a plurality of those pairs are fixed and formed into the fuel cell available in the market. The seals used between respective plates are arranged on a selected area of the plates with a form of resilient sealing bead, and a flow path is limited so that a fluid flows through the selected area. At this manufacturing method of which, the process of sealing and insulating the fuel cell unit are combined, rapidly curable liquid silicon is injected into a molded gate openings of respective paired plates standing in a row, and the liquid silicon flows into the space between the plates through the plates, and a) the pair of anode plate and cathode plate are sealed, and b) an insulation layer is formed at the back side of the anode.

COPYRIGHT: (C)2003,JPO

BEST AVAILABLE COPY